

ABSTRACT

A communication system transmits orthogonally encoded data at a symbol rate which is selected from a plurality of symbol rates. The data is encoded in a plurality of packets, each packet having a plurality of symbols having signal points in a field. The signal points of consecutively transmitted symbols are correlated unless the rate is changed, and the data is encoded such that only particular orthogonal descendants of a selected maximum rate code are used. The encoded data is transmitted to a receiver, and orthogonally decoded. A change in the rate of data transmission is recognized when the signal points of consecutively transmitted symbols are not correlated.